

REMARKS/ARGUMENTS

The Applicants have carefully considered this application in connection with the Examiner's Action and respectfully request reconsideration of this application in view of the foregoing amendment and the following remarks.

The Applicants originally submitted Claims 1-40 in the application. The Applicants previously canceled Claims 1-20 and 37-39. Herein the Applicants have amended Claims 21, 23, 37, and 38. No claims have been canceled or added. Accordingly, Claims 21, 23-27 and 37-40 are currently pending in the application.

I. Formal Matters and Objections

The Examiner has objected to Claim 21. An inadvertent typographical error was made that caused a word inversion. Claim 21 has now been amended in a manner that eliminates the error. The Applicants appreciate the Examiner's diligence in finding and bringing this error to their attention.

II. Rejection of Claim 37 under 35 U.S.C. §112

The Examiner rejected Claim 37 under 35 U.S.C. §112, first paragraph, as failing to comply with the written description requirement. The Examiner stated that the recitation in Claim 37 regarding "a buried layer doped throughout with germanium and a p-type dopant" was not supported by the description. Claim 37 has been amended to resolve this objection. The Examiner

also stated that the recitation "interconnects located within interlevel dielectric" was not supported by the specification. The Applicants respectfully call the Examiner's attention to FIGURE 8 and paragraph 0055 of the specification which provides the necessary support for this language in Claim 37. The Applicants respectfully request the Examiner to withdraw the rejection of Claim 37 under 35 U.S.C. §112, first paragraph.

III. Rejection of Claims 21 and 23 under 35 U.S.C. §102

The Examiner has rejected Claims 21 and 23 under 35 U.S.C. §102(b) as being anticipated by U.S. Patent No. 4,962,051 to Liaw. As the Examiner is no doubt aware, anticipation requires that each and every element of the claimed invention be disclosed in a single prior art reference; the disclosed elements must either be disclosed expressly or inherently and must be arranged as in the rejected claims.

Liaw discloses a buried silicon layer that is co-doped with germanium and boron. However, Liaw does not disclose a buried layer substantially of germanium that is co-doped with germanium and boron.

Therefore, Liaw does not disclose each and every element of the claimed invention and, as such, is not an anticipating reference with respect to independent Claim 21. Because Claim 23 is dependent upon Claim 21, Liaw also cannot be an anticipating reference for Claim 23. Accordingly, the Applicants respectfully request the Examiner to withdraw the §102 rejection with respect to these Claims.

IV. Rejection of Claims 24-27 and 37-40 under 35 U.S.C. §103

The Examiner has rejected Claims 24-37 under 35 U.S.C. §103(a) as being unpatentable over Liaw and further in view of the Examiner's comments. The Examiner rejected Claims 37-40 under 35 U.S.C. §103(a) as being unpatentable Liaw in view of U.S. Patent No. 7,067,856 to Ramdani, *et al.* (Ramdani). As the Examiner is no doubt aware, determination of obviousness requires consideration of the invention considered as a whole; the inquiry is not whether each element exists in the prior art, but whether the prior art made obvious the invention as a whole. Furthermore, there must be some suggestion or teaching in the art that would motivate one of ordinary skill in the art to arrive at the claimed invention; a reference that teaches away from a claimed invention strongly indicates nonobviousness.

Moreover, to establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, and not based on Applicant's disclosure.

With respect to Claims 24-27, Liaw does not teach or suggest all the elements of independent Claim 21, on which Claims 24-27 depend. Similarly, Liaw does not teach or suggest all the elements of independent Claim 37, on which Claims 38-40 depend. Independent Claims 21 and 37 each had previously been amended to resolve the Examiner's problem that the buried layer of

germanium was not pure. The previous amendment was not intended to indicate a non-germanium buried layer in each of Claims 21 and 37, but that the layer was substantially germanium and co-doped, as described in paragraphs 0048 through 0053 of the specification. As amended, independent Claims 21 and 37 each state that the buried layer is substantially germanium and not silicon, as described in Liaw. The shortcoming in Liaw is not addressed in Ramdani. Because Liaw, individually or in combination with Ramdani, does not teach or suggest the invention recited in independent Claims 21 and 37, Claims 21 and 37 are not obvious. Because Claims 24-27 and 38-40 are each respectively dependent on either Claim 21 or Claim 37, Claims 24-27 and 38-40 are also not obvious.

In view of the foregoing remarks, the cited references do not support the Examiner's rejection of Claims 24-27 and 37-40 under 35 U.S.C. §103(a). The Applicants therefore respectfully request the Examiner to withdraw the rejection of Claims 24-27 and 37-40.

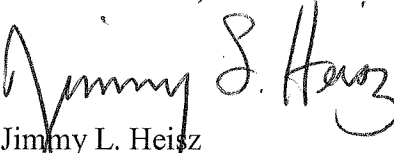
V. Conclusion

In view of the foregoing amendment and remarks, the Applicants now see all of the Claims currently pending in this application to be in condition for allowance and therefore earnestly solicit a Notice of Allowance for Claims 21, 23-27 and 37-40.

The Applicants request the Examiner to telephone the undersigned attorney of record at (972) 480-8800 if such would further or expedite the prosecution of the present application. The Commissioner is hereby authorized to charge any fees, credits or overpayments to Deposit Account 08-2395.

Respectfully submitted,

HITT GAINES, PC



Jimmy L. Heisz
Registration No. 38,914

Dated: October 23, 2006
P.O. Box 832570
Richardson, Texas 75083
(972) 480-8800